

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE**

SUOMEN COLORIZE OY,	x	
	:	
	:	
Plaintiff,	:	C.A. No. 12-715-CJB
	:	
v.	:	
	:	
VERIZON SERVICES CORP.,	:	
VERIZON ONLINE LLC, AND	:	
VERIZON DELAWARE LLC,	:	
	:	
Defendants.	:	
	:	
	:	
	:	
	x	

PLAINTIFF’S CLAIM CONSTRUCTION OPENING BRIEF

Dated: June 3, 2013

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I. INTRODUCTION

Plaintiff Suomen Colorize Oy (“SCO”) submits its opening claim construction brief for seven disputed terms of U.S. Patent No. 7,277,398 (the “’398 Patent”). All of SCO’s proposed constructions are supported by the patent’s intrinsic evidence. Equally important, all of SCO’s constructions consistently and reasonably build upon each other to fully give meaning to the asserted claims in this case.

II. BACKGROUND

(a) The ’398 Patent is Directed to Methods and Systems for Creating, Transmitting, Processing, and Using Selection Data that Encompasses Electronic Program Guides and Electronic Program Guide Data.

Risto Mäkiää, a solo Finnish inventor, developed the technology of the ’398 Patent in the early 1990’s. That technology, which was novel and forward looking, is now taken for granted by cable operators for creating, transmitting, processing, and using selection data that encompasses electronic program guides (“EPGs”) and EPG data. As discussed in detail in the ’398 Patent, the inventor sought to solve problems associated with prior art EPGs, which were not only very labor-intensive to produce, but were often transmitted as part of the media stream.

The ’398 Patent discloses and claims a different approach to creating, transmitting, processing, and using selection data that encompasses EPGs and EPG data. Claim 1 requires that the selection data (*e.g.*, EPG and EPG data) be formed on the basis of data within the media stream,¹ such as for example, Program and System Information Protocol (“PSIP”) data, and Program Specific Information (“PSI”) (in combination, per the ’398 Patent, “identification and control data”). Claim 1 also requires that the selection data be transmitted separately from the media stream,² potentially over a separate network (Claim 2) or as a separate file (Claim 12).

¹ The media stream contains multiple streams relating to one or more media services.

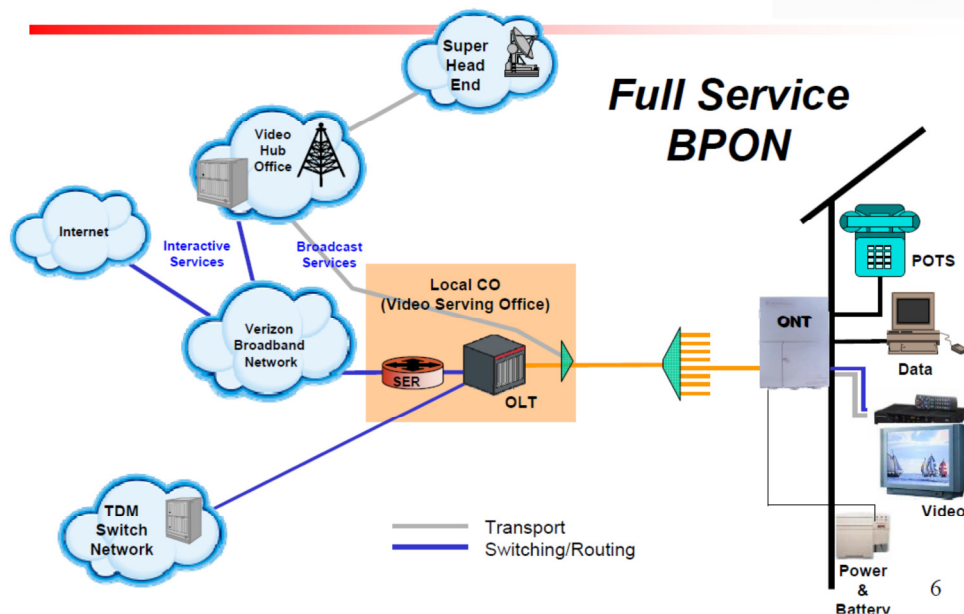
² Media can also be presented to the user in the form of an icon (Claim 11).

(b) The Accused Technology

Courts construe patent claims in the context of specific accused infringing products and services, and therefore some knowledge of those products and services helps provide the Court with useful information for claim construction. *See Wilson Sporting Goods Co. v. Hillerich & Bradsby Co.*, 442 F.3d 1322, 1326-27 (Fed. Cir. 2006). SCO believes that once the Court is familiar with the technology at issue, it will recognize that many of Defendants' proposed constructions merely serve the goal of avoiding infringement by inserting requirements that are not intrinsic to the patent.

Verizon Services Corporation, Verizon Online LLC, and Verizon Delaware LLC (collectively, "Verizon") are involved in the development, sale, and use of, *inter alia*, the FiOS system which provides video, voice, and data services. The television component of FiOS is called FiOS TV and features an Interactive Media Guide ("IMG") and EPG data. Verizon described to the Federal Communications Commission the architecture of the FiOS system, called Fiber to the Premises network ("FTTP"), as a combination of two video feed locations (a Super Head End and a Video Hub Office) that transmit video streams to a Local Central Office for distribution to subscriber homes. Verizon presented a schematic of this system to the FCC:³

³ See Implementation of Section 304 of the Telecommunications Act of 1996, Commercial Availability of Navigation Devices, CS Docket 97-80, *Verizon's Briefing for the Federal Communications Commission*, at 6 (October 20, 2005) (SCO00001312).

FTTP Architecture Implementation

Verizon delivers media services to subscriber set-top boxes using multiplexed streams (“Broadcast Services” in the diagram above), *i.e.*, streams that each contain numerous different streams of continuous programming. Within the service multiplex are metadata (such as PSI and PSIP data, or “identification and control data” as identified in the ’398 Patent) describing the contents of the multiple services (*i.e.*, programming streams). Verizon’s selection data, which encompasses IMG and EPG data, is then formed on the basis of identification and control data (that is, PSI and PSIP data) located within the “Broadcast Services” streams. The selection data is delivered to subscriber set-top boxes separately from the video stream (*e.g.*, IP network). Verizon’s IMG further allows viewers to select services (*i.e.*, programs) as icons:⁴

⁴ SCO00009198.



III. APPLICABLE LAW IN CLAIM CONSTRUCTION

Claim construction is an issue of law to be resolved exclusively by the Court. *See Markman v. Westview Instrs., Inc.*, 52 F.3d 967, 970-71 (Fed. Cir. 1995), *aff'd*, 517 U.S. 370 (1996); *Acumed LLC v. Stryker Corp.*, 483 F.3d 800, 804 (Fed. Cir. 2007). The proper hierarchy of evidence (from most to least authoritative) for claim construction purposes is the claim language itself, specification, prosecution history, and then extrinsic evidence. *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582-84 (Fed. Cir. 1996).

(a) The Primary Focus is on the Plain Language of the Claims

Claim construction begins with and focuses on the language of the claims because “[i]t is a bedrock principle of patent law that the claims of a patent define the invention to which a patentee is entitled the right to exclude.” *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005) (*en banc*) (internal quotations and citations omitted). Often, the claim language itself is sufficient to resolve the parties’ disputes.

(b) Specification

In addition to the claim terms themselves, the specification is “the single best guide to the meaning of a disputed term.” *See Phillips*, 415 F.3d at 1315. The specification may ascribe a

special meaning to a claim term based on the scope of its description, its prevailing use, by disclaimer of some broader meaning, or by explicit definition. *See, e.g., Watts v. XL Sys., Inc.* 232 F.3d 877, 882 (Fed. Cir. 2000). However, claim construction requires careful analysis to avoid unduly restricting the meaning of claim terms. For example, claims generally are not limited to specific embodiments set forth in the specification. *Phillips*, 415 F.3d at 1323. That is, “[a] basic claim construction canon is that one may not read a limitation into a claim from the written description.” *RF Delaware, Inc. v. Pacific Keystone Techs., Inc.*, 326 F.3d 1255, 1264 (Fed. Cir. 2003).

(c) Prosecution History

The Federal Circuit has noted that “[i]n addition to consulting the specification,” a court “should also consider the patent’s prosecution history.” *Phillips*, 415 F.3d at 1317. As with the specification, a patentee can limit the meaning of a claim term in the course of dealings with the Patent Office, which comprises a record on which the public is entitled to rely. *Vitronics*, 90 F.3d at 1582-83.⁵

(d) Extrinsic Evidence

Extrinsic evidence “may be used by the court to help understand the disputed limitation, [however] it may not be used to vary, contradict, expand, or limit the claim language from how it is defined, even by implication, in the specification or file history.” *Novartis Pharm. Corp. v. Abbott Labs.*, 375 F.3d 1328, 1334 (Fed. Cir. 2004). *See also Bell & Howell Document Mgmt. v. Altek Sys.*, 132 F.3d 701, 706 (Fed. Cir. 1997) (inventor testimony is entitled to “little or no consideration.”). Dictionaries and comparable sources are often useful in understanding the

⁵ *See also Phillips*, 415 F.3d at 1317 (“Yet because the prosecution represents an ongoing negotiation between the PTO and the applicant, rather than the final product of that negotiation, it often lacks the clarity of the specification and thus is less useful for claim construction purposes.”).

commonly used meanings of words, and judges are free to consult the dictionary so long as the dictionary definition does not contradict any definition found in the patent document. *Phillips*, 415 F.3d at 1322-23. While extrinsic evidence can be used by a court, it is generally less reliable than the intrinsic record in determining the legally operative meaning of claim language, and “is unlikely to result in a reliable interpretation of patent claim scope unless considered in the context of the intrinsic evidence.” *Id.* at 1319.

IV. ARGUMENT: SCO’S CONSTRUCTIONS ARE BASED ON THE ORDINARY MEANING OF THE ASSERTED CLAIMS IN ACCORDANCE WITH THE CONTEXT OF THE SPECIFICATION

(a) “Service information”

Term	SCO’s Proposed Construction	Verizon’s Proposed Construction
Service information	Plain meaning, based on proposed construction of “service”	Digital data describing the delivery system, content and scheduling/timing of broadcast data streams

Generally, the patent preamble is not used to define the scope of the invention but rather, it is the body of the claim that serves that function. *Catalina Mktg. Int’l v. Coolsavings.com, Inc.*, 289 F.3d 801, 808 (Fed. Cir. 2002).

Claim 1 begins with the preamble: “A method for providing a customer with service information via a terminal connected to a telecommunication network, the method comprising” (Joint Claim Construction Submission (D.I. 81) (“JCCS”), Ex. 1, SCO00000007, ’398 Patent at col. 6, ll. 42-44.) By inspection, this phrase merely identifies a purpose of the invention. As such, the preamble does not limit the ’398 Patent claims. *See Boehringer Ingelheim Vetmedica, Inc. v. Schering-Plough Corp.*, 320 F.3d 1339, 1345 (Fed. Cir. 2003) (“A preamble simply stating the intended use or purpose of the invention will usually not limit the scope of the claim.”). Specifically, the preamble: (1) does not recite any additional structure or steps beyond those explicitly stated in the claim; (2) is not relied upon in any of the

seven applicant responses to the Patent Office to distinguish the invention from the prior art; and (3) is the only place where the term “service information” appears in the claim. *See, e.g., Am. Med. Sys., Inc. v. Biolitec, Inc.*, 618 F.3d 1354, 1359-60 (Fed. Cir. 2010) (identifying the above three factors and holding that preamble phrase “photosensitive vaporization of tissue” did not constitute limitation of patent claims). Alternatively, if the Court determines that construction of this phrase is required, the term “service information” should be construed in view of its plain and ordinary meaning based on the agreed-upon construction of “service.”⁶ Nothing in the specification or the prosecution history suggests a special definition of the aforementioned phrase.

Verizon’s proposed construction improperly seeks to limit significantly the term “service information” to “SI” as defined in the “DVB Standard.”⁷ Such a narrow construction is inconsistent with the plain and ordinary meaning of “service information” for at least two reasons. *First*, the parties have agreed that “service” means “radio, television, video and various other services in audiovisual or text form.” Thus, Verizon’s narrow view that “service information” is limited to a “broadcast data stream,” cannot apply to asserted claim 1 because at least “video and various other services in audiovisual or text form” can be in a format other than a broadcast data stream. *Second*, the patent applicant was well aware of the special meaning the

⁶ The parties agreed to the following definition for the term “service”: “Radio and television programs, videos and various other services in audiovisual or text form are, for example, services.” JCCS, Ex. A, at 1.

⁷ The DVB Standard is a standard defined in European Telecommunication Standards Institute’s “Digital Video Broadcasting (DVB); Specification for Service Information (SI) in DVB Systems” (ETS 300 468, 1996). The DVB Standard defines the term “Service Information (SI)” to mean “Digital data describing the delivery system, content and scheduling/timing of broadcast data streams etc. It includes MPEG-2 PSI together with independently defined extensions.” (Joint Appendix (“JA”), SCO00000090.) This term is similar, within the context of broadcasting, to the ’398 Patent’s “identification and control data,” discussed in Subsection (d), *infra*, at 14.

term SI possessed within the DVB Standard, and explicitly specified the term “service information (SI)” when referring to “service information” as defined in the DVB Standard in its responses to the Patent Office.⁸ Moreover, the DVB Standard was incorporated into the patent prosecution history for the purpose of exemplifying the term “identification and control data.” *See*, 10/2/2006 Reply to the March 27, 2006 Official Action, at JA, at SCO00000079.

(b) “Frame” and “In a Frame Format”⁹

Term	SCO’s Proposed Construction	Verizon’s Proposed Construction
Frame	Digital packet	As defined in “in a frame format” below
In a frame format	Plain meaning, based on proposed definition of “frame”	In a data format in which services are provided for delivery via an appropriate network and in which such data includes, first, identification and control data for services, and then the actual services

“Frame.” SCO’s proposed construction of “frame” as a “digital packet” is supported by

⁸ *See, e.g.*, 4/26/2007 Reply to Accompany an[] RCE, JA, at SCO00000046 (“The Examiner is incorrect about the teachings of the cited section of Shiga. The cited excerpt of Shiga discloses that ‘The EPG data, as well as other types of accessory data, is transmitted in a Direct Video Broadcast (DVB) system as service information (SI). The data is used to produce and display an electronic program table is shown in FIG. 13’. This excerpt of Shiga teaches that the EPG data is transmitted in service information (SI) of a service multiplex, i.e. with the program data.”); JA, at SCO00000047 (“That is because what Shiga teaches here is that the EPG data is transmitted combined with the program data, and more specifically as a part of the service information SI of the program data, and then separated at the receiver.”); JA, at SCO00000048 (“For at least this reason, claim 40 is not anticipated by Shiga. Regarding claims 27, 36, and 43, Shiga explicitly discloses the transmission of service data and the program guide text data via the same broadcast system, more specifically, the service information (SI) of the broadcast service multiplex.”); 10/2/2006 Reply to the March 27, 2006 Official Action, JA, at SCO0000080 (“Column 20 line 60 to column 21 line 7 explicitly teaches that the EPG data is included in service information (SI) data which is multiplexed with the actual program data.”)

⁹ The terms “frame” and “in a frame format” are found in asserted Claim 1 of the ’398 Patent (JCCS, Ex. 1, at SCO00000000-09).

the intrinsic evidence to the '398 Patent.¹⁰ Both the patent examiner and patent applicant use the term “packet” and “frame” interchangeably throughout the prosecution history. For example, in a response to an Office Action, the patent applicant restates the examiner’s summary of a prior art reference explaining that, in the prior art reference, data is “packetized” and added together with the program multiplex, described as “data packet streams.” (7/26/2004 Amendment to Accompany an[] RCE, JA, at SCO00000243.) The applicant then argues that the examiner has mistakenly equated the “IPG packet data” in the prior art reference with the applicant’s “identification and control data . . . located in at least one frame of the multiplexed frames.” (*Id.*) While the examiner misinterpreted the term “identification and control data,” these examples demonstrate that both the examiner and applicant agreed that the format of the multiplexed streams were in a frame, or packet format. (*Id.*)¹¹ Further, the incorporation of the DVB Standard in connection with “identification and control data” clearly supports SCO’s construction that frames are packets, as the Standard frequently refers to the transport stream

¹⁰ While not dispositive, extrinsic evidence confirms this definition. “The elementary stream produced by the audio or video [MPEG-2] encoder is segmented into a series of PES packets . . . typically along frame boundaries in order to facilitate random access to the content. A frame is defined as a progressive picture, both fields of an interlaced picture, or a fixed number of audio samples. An access unit is either the coded representation of a picture or an audio frame. The PES packets, in turn, are further segmented into fixed-length TS packets to facilitate transmission in real time.” Bernard Lechner et al., *The ATSC Transport Layer, Including Program and System Information Protocol (PSIP)*, Proceedings of the IEEE Vol. 94, No. 1, Jan. 2006, at 78. (See Declaration of Francisco A. Villegas in Support of SCO’s Opening Claim Construction Brief (“Villegas Decl.”) ¶ 2, Ex. A.)

¹¹ See also, e.g., Examiner’s Search History, JA, at SCO000000174 (demonstrating examiner’s search strategy also equated the terms “packet” and “frame,” as searches included queries such as “@ad<‘199701717’ and multiplex\$3 near(packet\$1 or frame\$1) same service\$1 and provider\$1)” (emphasis added), “@ad<‘19970717’ and multiplex\$3 near(packet\$1 or frame\$1) same select\$3 near service\$1 same provider\$1)” (emphasis added), and “@ad<‘1997071’ and multiplex\$3 near(packet\$1 or frame\$1) same EPG same IRD same select\$3 near service\$1)” (emphasis added).

structure as “Transport Stream packets.”¹²

“In a frame format.” SCO believes that this term can be understood and applied based on plain meaning, in conjunction with SCO’s proposed construction of “frame.”¹³ Verizon, however, seeks to rewrite the claim by improperly importing the limitation that the data include “first, identification and control data for services, and then the actual services.” Verizon’s purported basis for such a narrow claim construction position appears to stem from Figure 1 below, where control and identification data are labeled as 1a and service data as 1b-1n.¹⁴

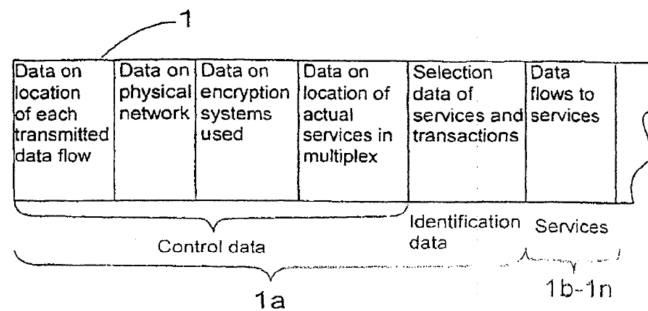


FIG. 1

But Figure 1 is explicitly described as “a schematic view of a *typical* multiplexed frame with its services,”¹⁵ meaning that Figure 1 merely represents an outline of an exemplary multiplexed frame. Therefore, there is no basis to conclude that this limitation requires “**first**, identification and control data for services, **and then** the actual services.” (emphasis added). In fact, Verizon’s proposed construction is contrary to the Federal Circuit’s holding that any imposition of a specific order of steps in a claim must be required by the language of the claims, specification, or the prosecution history. *See Respironics, Inc. v. Invacare Corp.*, 303 Fed.

¹² See, e.g., DVB Standard, JA, at SCO00000095, 96, 99.

¹³ “Format” is defined as a “2 : general plan of organization, arrangement, or choice of material (as for a television show).” Merriam-Webster’s Collegiate Dictionary, p. 458 (10th ed. 1996). (See Villegas Decl. ¶ 3, Ex. B.)

¹⁴ See SCO00000003.

¹⁵ See JCCS, Ex. 1, at SCO00000006, col. 3, ll. 39-40 (emphasis added).

Appx. 865, 870-871 (Fed. Cir. 2008) (finding that numbered steps did not need to be performed sequentially). Contrary to Verizon's definition, the identification and control data can be interspersed and may occur in any sequential order. This is supported in the intrinsic record, as the DVB Standard explicitly provides that "it is recommended to re-transmit SI sections specified within this ETS several times, even when changes do not occur in the configuration." (JA, at SCO00000097.) Nothing in the intrinsic evidence requires otherwise.

(c) "Multiplexing" and "Service Multiplex"¹⁶

Term	SCO's Proposed Construction	Verizon's Proposed Construction
Multiplexing	Interleaving two or more data signals together	To create a multiplex; see proposed definition of "service multiplex" below
Service multiplex	A stream or streams of all the digital data carrying one or more services	A stream of all the digital data carrying one or more services within a single physical channel

The primary dispute between the parties in connection with the terms "multiplexing" and "service multiplex" is whether those terms require the limitation of a single physical channel. Verizon attempts to limit the service multiplex of Claim 1 to the unitary multiplex definition of the incorporated DVB Standard, which defines a "multiplex" as "[a] stream of all the digital data carrying one or more services within a single physical channel." (JA, at SCO00000090.) However, Verizon conveniently ignores that the same DVB standard contemplates the concept of a "bouquet," which, as laid out in Figure 2 below, is considered to be a collection of services marketed as a single entity—that is the entire service offering of, for example, a cable service provider available to the subscriber. *Id.* Hence, the limitation of "a single physical channel" is overly restrictive for the term "service multiplex."¹⁷

¹⁶ The terms "multiplexing" and "service multiplex" are found in Claim 1 of the '398 Patent (JCCS, Ex. 1, at SCO00000000-09).

¹⁷ JA, at SCO00000091.

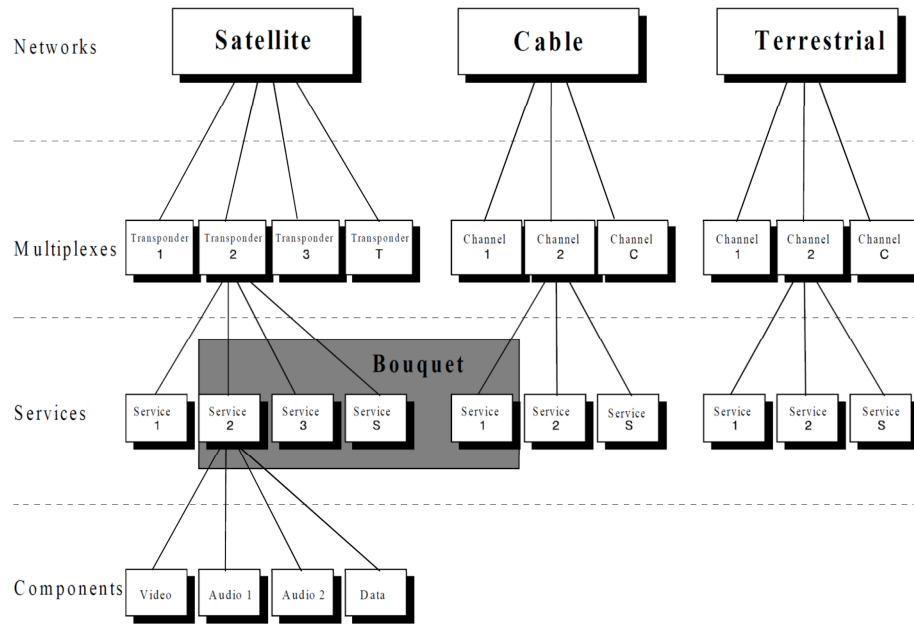


Figure 1: Digital broadcasting, service delivery model

SCO's proposed definitions of both "multiplexing" and "service multiplex" allow for the possibility of one or more physical channels to be part of a service multiplex—a concept discussed and fully supported under the DVB Standard, which acknowledges the sharing of data between multiplexes. (JA, at SCO00000092-94.) No limitation to a single physical channel is required in the specification or otherwise in the prosecution history. More specifically, the specification does not limit the service multiplex to a single channel. To the contrary, the patent discloses that a service multiplex can be a complex amalgam of data feeds. For example, the specification makes clear that a user can access different networks. (JCCS, Ex. 1, at SCO00000006, col. 3, ll. 20-23.) Multiplexing makes it possible to receive several services from a plurality of such physical sources simultaneously. *Id.* at col. 3, ll. 24-26. This concept is consistent with the DVB Standard's acknowledgement that a "network" is a "collection of MPEG-2 Transport Stream multiplexes transmitted on a single delivery system, e.g., all digital channels on a specific cable system." (JA, at SCO00000090.)

(d) “Identification and Control Data”¹⁸

Term	SCO’s Proposed Construction	Verizon’s Proposed Construction
Identification and control data	Data used to identify and/or configure services within the service multiplex	Data located in the first part of the multiplexed frame which includes both: [1] the identification data, i.e., service selection data such as title information used to identify a specific service; and [2] control data, i.e., data indicating the location and configuration of the service

SCO’s proposed construction of “identification and control data” comports with the plain meaning of the terms,¹⁹ and is fully supported by the intrinsic record. For example, the DVB Standard has been incorporated by reference with the intent to provide examples of “identification and control data,” most notably data commonly referred to as PSI (Program Specific Information)²⁰ and “additional information [to] provide information on services and events carried by different multiplexes, and even on other networks.”²¹ SCO understands the term “identification and control data” to mean any or all of the data included in the numerous tables identifying and/or configuring the services within the service multiplex. Further, as

¹⁸ The term “identification and control data” is found in asserted Claim 1 of the ’398 Patent (JCCS, Ex. 1, at SCO00000000-09).

¹⁹ “Identification” is defined as “1 : an act of identifying: the state of being identified.” Merriam-Webster’s Collegiate Dictionary, at 575 (10th ed. 1996). “Control” is defined as “3: one that controls: as . . . b : a device or mechanism used to regulate or guide the operation of a machine, apparatus, or system.” *Id.* at 252. (See Villegas Decl. ¶ 3, Ex. B.)

²⁰ “The PSI data provides information to enable automatic configuration of the receiver to demultiplex and decode the various streams of programs within the multiplex.” (JA, at SCO00000092.) Such data can include the Program Association Table, Conditional Access Table, Program Map Table, and Network Information Table. (*Id.* at SCO00000092-93.) Such data would be “control” or configuration data.

²¹ (*Id.* at SCO00000093.) These tables can include the Bouquet Association Table, Service Description Table, Event Information Table, Running Status Table, Time and Date Table, Time Offset Table, and Stuffing Table. The equivalent in the United States for these tables would be known as PSIP (Program and System Information Protocol) tables. Such data would be “identification” data.

indicated in the DVB Standard and demonstrated in the figure replicated below,²² “[w]here applicable the use of descriptors allows a flexible approach to the organization of the tables and allows for future compatible extensions.”²³

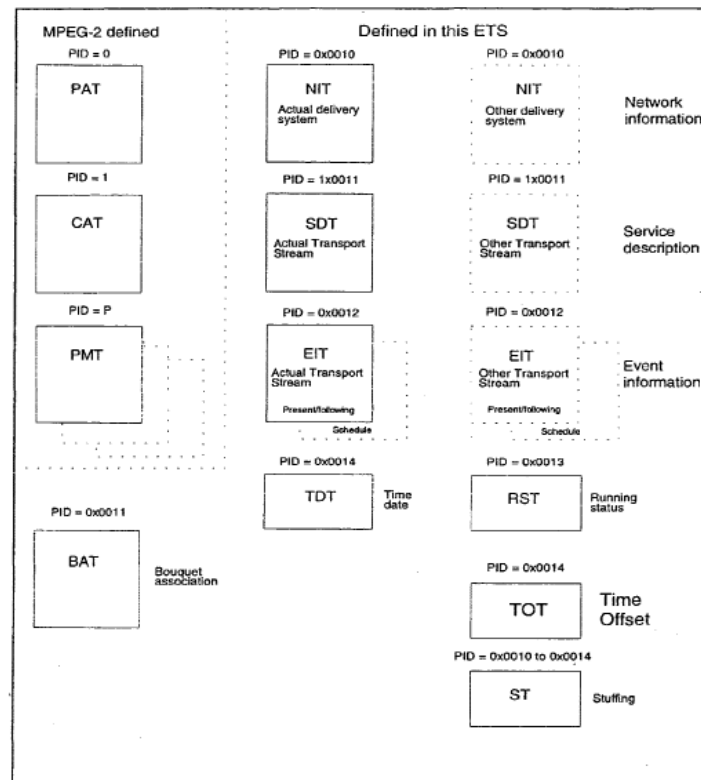


Figure 2: General organization of the SI

Verizon urges an extreme and unnaturally narrow construction, requiring that “identification and control data” must at all times refer to both “[1] identification data, i.e., service selection data such as title information used to identify a specific service; and [2] control data, i.e., data indicating the location and configuration of the service.” (JCCS, Ex. A. at 5.) While this information may all be present in the service multiplex in order to comply with certain telecommunications industry standards, nothing in the intrinsic record supports the construction that *all* of this data must be used when, for example, forming selection data.

²² *Id.* at SCO00000094.

²³ *Id.*

SCO's proposed construction of this term is the only reasonable construction of the claim language. When read in light of the claim as a whole, and as supported by the intrinsic evidence, the "identification and control data" is, by necessity, a single term. Had the patent applicant intended two separate components to comprise identification and control data, he would have claimed: identification data and control data. Instead, the phrase describes a general class of data (element 1a of Figure 1) associated with the multiplex. Moreover, the patent specification supports SCO's proposed construction. When describing Figure 1, the specification defines "identification and control" data as a single data type comprising: "information regarding the form in which each service is connected with the multiplexed frame." JCCS, Ex. 1, SCO00000006, col. 3, ll. 58-63 (the specification also states that such information may optionally include configuration information). In contrast, Verizon's interpretation would require that all "service selection data such as title information used to identify a specific service" and all "data indicating the location and configuration of the service" be used *all at the same time* in, for example, forming selection data. This would be nonsensical. SCO's proposed definition is logically and consistently defined to acknowledge that "identification and control data" does not need to be at all times the complete set of data included in the numerous tables identifying and/or configuring the services within the service multiplex. Rather, SCO's proposed definition recognizes that, while all of such data *could* be used, only a subset would be required for specific tasks or functions. *See Phillips*, 415 F.3d at 1321 ("Even when guidance is not provided in explicit definitional format, the specification may define claim terms by implication such that the meaning may be found in or ascertained by a reading of the patent documents.").

(e) “Selection Data”²⁴

Term	SCO’s Proposed Construction	Verizon’s Proposed Construction
Selection data	Program menu data (for example, the selection menu data, the EPG data, or both)	The interactive program guide; i.e., data regarding the services of a service provider to be displayed to the user for the selection of a service

The phrase “selection data” is not explicitly defined within the intrinsic record of the ’398 Patent. SCO contends that “selection data” has a plain and ordinary meaning of “data used for selecting,” as consistent with the ordinary definitions of the two terms comprising that phrase²⁵ that will not be aided by construction.”²⁶

Verizon proposes a severely restrictive definition limited to “data . . . *to be displayed to the user* for the selection of a service,” which is contrary to the plain meaning of the term, and conflates with it other limitations therein (Claim 1 explicitly states that “selection data” is formed “for the selection of the service data.”), and even adds limitations outside of the claim (Claim 1 does not mandate that any, let alone all, of selection data be displayed to the user).

To underscore the plain and ordinary meaning of the term, SCO’s proposed construction explains that “selection data,” *i.e.*, the data for selecting, includes program menu data, all of which need not be displayed to the user. Specifically, SCO’s construction conveys that program menu data may include, for exemplary purposes, selection menu data, the EPG data, or both. (*See, e.g.*, JA, at SCO00000243.) As such, program menu data includes any data required for the

²⁴ The term “selection data” is found in asserted Claim 1 of the ’398 Patent (JCCS, Ex. 1, at SCO00000000-09).

²⁵ “Selection” is defined as “1 : the act or process of selecting: the state of being selected.” Merriam-Webster’s Collegiate Dictionary, p. 1059 (10th ed. 1996). “Data” is defined as “1: factual information . . . used as a basis for reasoning, discussion, or calculation. . . . 2: information output by a sensing device or organ that includes both useful and irrelevant or redundant information and must be processed to be meaningful 3: information in numerical form that can be digitally transmitted or processed.” *Id.* at 293. (*See* Villegas Decl. ¶ 3, Ex. B.)

²⁶ JCCS, Ex. 1, SCO00000007, col. 6, l. 51.

selection, identification, and transmission of a service to be displayed on a display unit. (*See, e.g., JCCS, Ex. 1, at SCO00000007, col. 6, ll. 57-62.*) While some of that data itself may be displayed to the user, SCO's construction recognizes that background enabling data therein may be required for full functionality and may not be displayed to the user.

- (f) “On the Basis of” and “Forming Selection Data for the Selection of the Service Data on the Basis of the Identification and Control Data Located in the Service Multiplex”²⁷

Term	SCO's Proposed Construction	Verizon's Proposed Construction
On the basis of	Established in part from	To be construed only in the context of “forming selection data . . .” element
Forming selection data for the selection of the service data on the basis of the identification and control data located in the service multiplex	Plain meaning, based on proposed constructions of “selection data,” “service data,” “on the basis of,” “identification and control data,” and “service multiplex”	Separating the identification and control data located in the service multiplex from the multiplexed frame of each desired service and using it to form selection data

The primary dispute between the parties is whether selection data is formed directly and purely “from” or established directly or indirectly “in part from” the identification and control data. SCO's proposed construction mimics the plain meaning of the term,²⁸ requiring that identification and control data be the foundation or a component of the formation of the selection data. Verizon's proposed construction is improperly narrow and tailored to its invalidity arguments. There is nothing in the claim to indicate or suggest that it should be narrowed to require formation purely and directly from the identification and control data or purely and

²⁷ The terms “on the basis of” and “forming selection data for the selection of the service data on the basis of the identification and control data located in the service multiplex” are found in asserted Claim 1 of the '398 Patent (JCCS, Ex. 1, at SCO00000000-09).

²⁸ “Basis” is defined as “1: the bottom of something considered as its foundation 2: the principal component of something 3 a: something on which something else is established or based b: an underlying condition or state of affairs. . . .” Merriam-Webster's Collegiate Dictionary, p. 96 (10th ed. 1996). (*See Villegas Decl. ¶ 3, Ex. B.*)

directly from data contained in the service multiplex. Thus, contrary to claim construction tenets, Verizon is importing a limitation into the claim.

Moreover, Verizon ignores the ordinary and customary meaning of the term and fails to interpret this term in the proper context of the entire patent, including the specification. *See Phillips*, 415 F.3d at 1313. The specification and prosecution history make absolutely clear that “on the basis of” does not mean that selection data is formed purely and directly from the identification and control data from the service multiplex, as Verizon seems to propose. Guided by its invalidity contentions, Verizon proposes a broad claim construction that contemplates, for example, using Event Information Tables, described in the DVB Standard as containing “data concerning events or programmes such as event name, start time, duration, etc. . . .” (JA, at SCO00000093.) Event Information Tables, which reside in the service multiplex and which contain EPG data, are thus types of data considered to be “identification and control data.” The separation or extraction of the EPG data from the Event Information Tables to create selection data purely and directly from the EIT as “control and identification data” would have been known in the art—something applicant knew in incorporating by reference the DVB Standard, and something the examiner knew in granting the patent.²⁹

Nowhere does Claim 1 require that the selection data be formed purely and directly from the identification and control data. Moreover, the prosecution history clearly shows that the

²⁹ Claims should be construed to preserve their validity. *Phillips*, 415 F.3d at 1327 (citations omitted). The Court should “look[] to whether it is reasonable to infer that the PTO would not have issued an invalid patent, and that the ambiguity in the claim language should therefore be resolved in a manner that would preserve the patent’s validity.” *Id.*; *Carman Indus., Inc. v. Wahl*, 724 F.2d 932, 937 n.5 (Fed. Cir. 1983); *Rhine v. Casio Inc.*, 183 F.3d 1342, 1345 (Fed. Cir. 2004).

applicant distinguished the present invention over such examples in the prior art.³⁰

[W]hat Shiga teaches here is that the EPG data is transmitted combined with the program data, and more specifically as part of the service information SI³¹ of the program data, and then separated at the receiver. [In other words, forming purely and directly from the identification and control data in the multiplex.] This is completely contrary to the claims which require forming selection data for the selection of service data on the basis of the identification and control data located in the service multiplex.

(JA, at SCO00000047.)³² This distinction makes clear that, in the asserted claims, selection data was not intended be formed purely and directly from identification and control data.

SCO does not believe that “forming selection data for the selection of the service data on the basis of the identification and control data located in the service multiplex” needs construction. This term can be understood and applied based on its plain meaning, in conjunction

³⁰ See *SciMed Life Sys., Inc. v. Advanced Cardiovascular Sys., Inc.*, 242 F.3d 1337, 1343-44 (Fed. Cir. 2001) (limiting claim to unitary lumen where prior art was distinguished in part on the ground of use of dual lumen configurations).

³¹ SCO contends that “service information SI” is most accurately equated with “identification and control data.” (See Section IV, Subsection (a), *supra* at footnote 7.)

³² The applicant has also argued, for example, the following:

The presently claimed invention overcomes the above problems by first multiplexing a plurality of service data in a frame format for service transmission, whereby identification and control data of the services are located in at least one frame of the multiplexed frames and then forming selection data for the selection of the service on the basis of the identification and control data located in the service multiplex. After that, the selection data, based on the identification and control data, is transmitted separately, without the actual service data of the service multiplex, to the customer terminal for displaying the selection data. In other words, the program multiplex, particularly the control and identification data of said multiplex, is used when forming the selection menu, which can then be transmitted as such. Neither Coleman et al. nor previously cited EP 0756423 A1 (Iwafume) discloses this claimed solution. To the contrary, they both teach one skilled in the art to first store the information for the selection menu and then either to multiplex it with the service data or to form a separate multiplex for the selection menu.

(JA, at SCO00000262-263.)

with SCO's proposed constructions of "selection data," "service data," "on the basis of," identification and control data," and "service multiplex."³³

For all of the foregoing reasons, SCO urges the Court to adopt its proposed construction of "on the basis of."

V. CONCLUSION

It is readily apparent the Verizon's claim constructions impermissibly restrict the plain meaning of the claims in an attempt to avoid infringement, rather than provide the Court with a reasonable alternative interpretation to the ones SCO proposes. Since SCO's proposed constructions are fully supported by the law and facts of this case, it respectfully requests that the Court to adopt its constructions in their entirety.

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³³ "Form" is defined as "2 : to give form or shape to: fashion, construct." Merriam-Webster's Collegiate Dictionary, p. 458 (10th ed. 1996). (See Villegas Decl. ¶ 3, Ex. B.)